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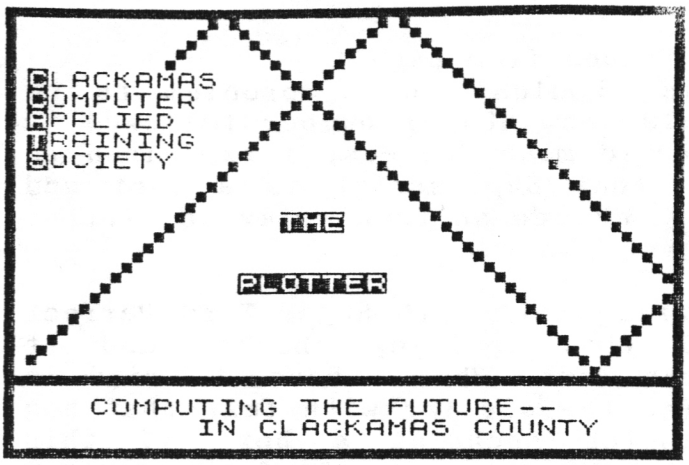
THE PLOTTER

CLACKAMAS COMPUTER APPLIED
TRAINING SOCIETY
NEWS LETTER
****
VOLUME 11 ** NUMBER 5
******
MAY 1993



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MEETING

The MAY meeting will be:

on: SUN., MAY 23 1993

MEETING open at: 1:00 P.M.
in: COMMUNITY ROOM
FAR WEST FEDERAL BANK
OREGON CITY SHOPPING CENTER

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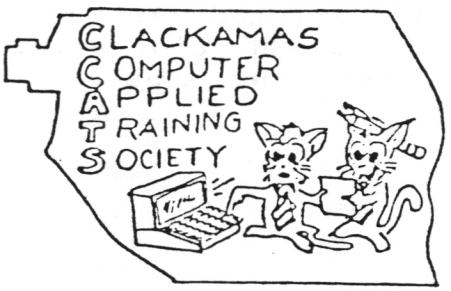
FROM THE EDITOR'S DESK

I recently ran into an odd situation with a word speller my brother was using with a word processor called Rainbow. To properly give a back ground, He has a surveying business (he is older than I am and I am 80) so lengths and angles are what it is all about. He has been using his IBM compatible (or is it MSDOS compatible) for printing out legal descriptions. When entering the symbol for degrees he has been using the printer graphic table and the symbol obtained with ALT 248 which nicely places the symbol after a number. This looks fine on the screen but when he sends the text to the word speller the computer locks up when it gets to the first number with the degree symbol. My guess is that the speller program doesn't like characters above 127, but then I really don't know how spelling checkers work.

My brother is now following my recommendation that he use the Superscript font in conjunction with lower case o to print the degree symbol. Granted, it doesn't produce a superscript o on the screen but

>> >>



Continued from page 1
this shouldn't be a problem as he would know that a number followed by o would mean degrees. I explained to him that Superscript is a font and his WP doesn't display different fonts.

I tried this with Super-Word Perfect and it's spelling checker and it works fine. What I haven't tried is using the speller with text that has graphics such as a box. If this works then my idea of of the program not accepting characters above 127 isn't rational. Any suggestions out there?

Last month I mentioned a problem I was having in printing out the front page of THE PLOTTER. I had just changed printers to a new EPSON LQ 590. The bottom border is supposed to be a line of expanded phi characters but I was getting expanded italic h's. Well, dummy me, when I set up the printer I neglected to set the dip swith properly so I was printing with the italic table for characters above 127 instead of the U.S.A. table.

The good old MSCRIPT and 2068 are still being used to print the front page of THE PLOTTER. MSCRIPT V 5.3 handles graphic characters very nicely so why change? Well one reason to change to the Citizen computer is to learn how to do it. Another thing to consider is to possibly designing a graphic character just to be different. The Epson printer can be programed to produce user defined characters, plus the alphabet in ROM can be moved to RAM so regular typing can be done along with special characters. These two instruction sets seem to be a carry over from other Epson printer models. The instruction to use RAM only is slightly changed from a manual I have on the JX-80 color printer. No, I only have the manual, not the printer.

MEET THE DUNLOPS

Bill Dunlop has been a recent contributor to THE PLOTTER and continues to add a new type of articles and programs. He has been in CCATS for some years and is one of our staunch members.

One never knows what kind of an occupation a computer enthusiast may have. Well, Bill runs a CLOWN business which is one reason his attendance at meetings is sometimes spiced with his makeup and special garments, having just finished a job.

Bill also has a magic supply shop for those hard-to-get magic things. Here is a chance for some of our readers who delve in the mystery of magic to investigate what Bill has to offer. His business address is The Magic Cave, 8328 N. Lombard, Portland, OR 97203.

Alice Dunlop, Bill's sister, is in the clown business with him. She also is an active member in CCATS. Her occupation is running a green ware ceramics business. She is active in a ceramics organization and uses her trusty 2068 in helping to put out a news letter for that organization, plus catalogs for her business. Some of our readers may have family members who are interested in ceramics. Contact Alice at 18065 S.W. Blanton, Aloha, OR 97007 for information on what she supplies.

Here is a short program from Bill--

```
    5 REM BILL DUNLOP 4/93
   10 REM   COUPLE OF CUTE IDEAS
FOR YOUR PROGRAM INSTRUCTIONS
   20 POKE 23624,120: REM BRIGHT
WINDOW #0
   21 PRINT #0;"THIS is a TEST Pr
int on line 24": PAUSE 0
   22 GO SUB 30
   23 CLS
   24 PRINT #0;"END": PAUSE 0
   25 STOP
   30 POKE 23624,56: REM NORMAL P
APER AFTER WINDOW #0
   35 RETURN
```

BITS & BYTES

by: Rod Gowen

In this column I try to bring you the latest and complete information and news available to me regarding the world of TS computing. One way that I can accomplish this is if I have the support of you, the reader, in collecting news that may be of interest to other readers. If you have any news, rumors or other tidbits of information that fits this description, why not send it along? We will be watching!

RMC STILL WAITING TO MOVE!---

We are eagerly awaiting news from our lender telling us that the papers are ready to sign on our new house. Once the news is received, we will be on our way. Not a long move, only a couple of miles, so that we could keep our long established phone numbers and remain in business. Will keep you posted as to our progress!

EARLY WRITING-------

I am writing this a week or so early this month in anticipation of our move. I would sure hate to miss a month with this column.

That's it for now!

See you next time. . .

WIDGET COST

Dick Wagner

Here is the story.....
Recently, while going through a stack of old records, I saw a bill made out to my uncle's long-gone hardware store. This was for 3 dozen Widgets, Model 3B. (Widgets were a hot sales item in the early 1900s). The faded ink showed the cost to be $1?4.?6. I couldn't make out the second and fourth digits. My curiosity was arroused with the potential problem to solve -- what did Uncle pay for 3 dozen Widgets, Model 3B in those days?

Stop right here and develop a program to answer the question. If you want to see how I arrived at an answer, read the following program and key it in.

```
 10 REM reconstruct the cost of 3
doz. Widgets, Model 3b.
 20 REM X=10s of dollars missing
    digit
 30 REM Y=10s of cents missing
    digit
 40 FOR X=0 TO 9
 50 FOR Y=0 TO 9
 60 REM convert cost to cents
 70 LET Z=100*100+X*1000+4*100+
    Y*10+6
 80 IF INT(Z/36)=Z/36 THEN GOTO
    130
 90 NEXT Y
100 NEXT X
110 PRINT "NO SOLUTION FOUND"
120 GO TO 150
130 PRINT "THE COST OF 3 DOZ.
    WIDGETS WAS ";Z/100
140 PRINT "THE COST OF 1 MODEL
    3B WIDGET WAS ";(Z/100)/36
150 END
```

NOTE: please pardon the poor program arrangement. I am typing it into a MS-DOS program called SUPER-WP, the first time to use this word processor program.

POKES, ETC FOR THE 2068

Dick F. Wagner

Here are the last of POKES ETC I have on file--

DETERMINES IF N IS EVEN OR ODD. LET A=1: IF (INT(N/)*-N<>0 THEN LET A=-1
A=(+1) if even, (-1) if odd. Normal method of (-1)^N will not work on 2068. LET A=COS (N*PI) also works but slower.

DARKER CHARACTER PRINTING

```
 1 CLEAR 56675
 2 RESTORE: LET A=57786
 3 READ N
 4 IF N=-1 THEN GO TO 8
 5 POKE A,N
 6 LET A=A+1
 7 GO TO 3
 8 STOP
 9 DATA 17,0,221,213,1,0,3,42,
54,92,36,126,167,31,182,18,35,
19,13,32,246,16,244,225,37,34,
54,92,201,-1
```

RUN AND RANDOMIZE USR 57786
for darker image.
POKE 23607,60 for normal image.

>> >>

Continued from page 3
AID IN DEBUGGING BY ADDING A DOUBLE SPACE BETWEEN PROGRAM STATEMENTS.

```
 1 CLS: LET FLAG=2: LET A=26709
 2 LET END=((PEEK 23627+256*PEEK
23628)-1): GO SUB 8: FOR A=26710 TO
END-1
 3 IF PEEK A=14 THEN LET A=A+4: NEXT
A
 4 IF PEEK A>31 OR PEEK A=13 THEN
PRINT CHR$ PEEK A;: IF PEEK A=13
THEN PRINT
 5 LET FLAG=FLAG-1: IF PEEK A=13
THEN GO SUB 8: LET FLAG=3: LET
A=A+3: PRINT " ";: NEXT A
 6 NEXT A: STOP
 7 REM LINE # SUB
 8 IF A>END-1 THEN STOP
 9 PRINT PEEK (A+2)+(PEEK (A+1) *256
;:  RETURN
```

ALL DONE?

Bill Dunlop

When it's all been said and done there isn't much we can do about the fact that we are in the minority when we continue to support an outdated "toy" computer with no future.

But has it all been said? Has it all been done? I don't think so. I have not had a week go by when I haven't come up with some small improvement to some program. Not a month that I don't come up with an idea for a programming project that I would like to have time to explore a bit farther.

A good friend of ours, Jack Dohany, has shown us one way to help keep our computers alive and well. His refinements on existing programs borders upon art. All Mscript users should thank him for his vision and dedication. He has done many other things for us , but this is one example that everything has NOT been done. How many other programs could use the kind of refinement that Mscript has undergone? Lots of them!

Even though you do not feel as though you are enough of a "guru" to write the ideal program each of us has spotted changes that we would like to have in one or more programs that we have used. Write about them. Share with other users about what you have changed or would like to see changed. Tell guys like Jack and you may be quite surprised at what these orphans will do, even into the (may I say it?) FUTURE!

INPUT CURSORS

(for TS 2068)
by Bill Dunlop

I like to get newsletters with bits of programming that I can use to dress-up my programming or add to existing programs that I feel have "rough" spots in them. I have seen a variation of this one before but the Jan '93 issue of UPDATE Mag. got me started playing around with this one again.

"On the TS2068 to get a question mark (?) displayed in an INPUT statement as a cursor you need to POKE 23617,236 " It works, but, how much does that help in making a program clearer? Some, I agree, but if I am asking the user for a dollar amount why not make the cursor a flashing dollar sign ($) to keep money in mind during the INPUTing process?

We can do just that with a simple POKE of the keys!

```
10 POKE 23617, 240: INPUT " Testi
ng "; a
```

Now, enter this short program and make yourself some notes.

```
10 FOR x=255 TO 100 STEP -1
20 POKE 23617,x: INPUT "test";a$
30 REM press a key and ENTER
40 PRINT x-1;" as cursor now "
50 LET a$=""
60 NEXT x
```

>> >>

Some values just give a RAZZ but you can get past them with additional entries. Notice that the odd numbered POKEs change the cursor after the first character is input! Even numbers are stable until the ENTER key is pressed whereupon the system resets the proper code, thus if you want to use the INPUT with the "custom" cursor you must re-POKE 23617.

A few of these even make sense as useful cursors! I like value 209 with its NEW changing to DATA when changing a value inside a program. The > changing to a < for a "drive #" prompt looks almost MeSsDOSian!

Have Fun. Bill

MORE ON DISK DRIVE SPEED

Last month we reported on a method of displaying the speed of the first 8 revolutions of a floppy disk drive, as determined by Bill Pedersen and Donald Lambert. This information pertained to Larken and Oliger drive systems. There was one trouble with this information, Don reports, and that is it is applicable only to Larken/Oliger and Oliger.

Don assumbed the Larken/Oliger combination would be the same as the Larken system but it seems that just isn't the case. In the last correspondence from him, he is still trying to work out the machine code changes necessary to accomplish a workable program.

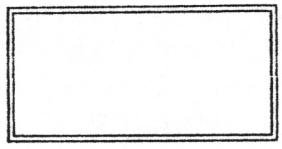
Interestingly, Don is reading MSDOS floppies with MSCRIPT on his 2068 computer.

DOUBLE SIDED BOX

Dick F. Wagner

This program makes it easy to generate single and double line boxes up to the maximum size of the screen in PIXELS, 256X176. The program is designed to allow the smaller box to be defined as the number of PIXELS smaller than the outer box. The program as printed is 2 PIXELS smaller all around than the out side box.

Positioning is by the upper left corner in place of the usual lower left corner for PLOT. The see it operate just input PIXEL values when called for, such as 5,5 for upper left corner and 100,100 for the size. The printed box shown is 100X50 in size. It was printed by using USE9, a Dohany printer driver.



```
  10 REM double line box program
 by Dick Wagner,4/93
  20 CLS : REM in 200 on, the 2
and 4 determine the line separat
ion
  25 REM define box from top lef
t corner, row and column, in PIX
ELS
  30 INPUT "enter row of upper l
eft corner";TOP
  40 INPUT "enter column for lef
t top corner ";LEFT
  50 INPUT "enter width of box,
in PIXELS ";WIDE
  60 INPUT "enter height of box
in PIXELS ";HEIGHT
  70 CLS
 120 REM print outside lines
 150 PLOT LEFT,175-TOP
 160 DRAW WIDE,0
 170 DRAW 0,-HEIGHT
 180 DRAW -WIDE,0
 190 DRAW 0,HEIGHT
 195 REM print inner lines
 200 PLOT LEFT+2,175-TOP-2
 210 DRAW WIDE-4,0
 220 DRAW 0,-HEIGHT+4
 230 DRAW -WIDE+4,0
 240 DRAW 0,HEIGHT-4
9999 SAVE /"box prog"
```

the plotter

pc page

by: Rod Gowen

Have you been along on my OS/2 oddysey so far? If so, we will now continue--

The new 256 Mbyte hard drive arrived and was duly installed. The next step was to set up the drive. With OS/2 there are several ways to install the operation system.

First, you can install OS/2 as your only system. Second, you can add it to your DOS system using the DUAL BOOT method. Third, you can install the BOOT MANAGER, which will allow you to partition your hard drive and install several different operationg systems on the same computer and choose the one you want to use as the system starts.

As I had had problems trying the DUAL BOOT on the 120 Mbyte hard drive, I opted for the BOOT MANAGER method with the larger drive. I proceeded with the installation guide's procedures and to my great suprise, it worked! I now have 4 partitions on my hard disk--the BOOT MANAGER takes the first 1 Mbyte, DOS has 30 Mbytes, OS/2 has 35 Mbytes and the remaining 180 Mbytes is my Extended Logical drive, to be used for applications and data which can be accessed and shared by both DOS and OS/2.

After restoring my DOS C: partiton, I checked to see if it would boot properly. After restoring the D: (logical) drive I checked out all my DOS applications and made the needed modifications to ensure proper operation, I turned my attention to the OS/2 operating system.

I used Ctrl-Alt-Del to restart the computer and chose the OS/2 option from the BOOT MANAGER menu. OS/2 was installed and the system came up in the "Desktop", a screen with "objects" (icons, to Windows users) around it that indicate various programs, utilities and sub-menus. There are objects depicting disk drives that, when selected with a double-click of the left-hand mouse button, will bring up a graphic directory of the drive chosen. All sub-directories and files are shown as objects as well. Double-clicking on a sub-directory will give you a directory of that sub-directory. Doing so on a program will run that program. OS/2 is not taking full advantage of the 3 button mouse at this time. Only two buttons are used. I have found that on my system, using a Chicony keyboard with built-in trackball, the left and the right buttons are active, a friend of mine is using a Logitech mouse and he has only the left and center button active. It will be nice if IBM gets to using the third button.

In part four I will continue with my description of the operating system and how I got it set up.

ACTION, COLOR, AND SOUND

Dick F. Wagner

This article provides two programs that make good use of the GWBASIC LINE command. This command is some different than the Sinclair BASIC command for LINE.

LINE can stand alone by establishing its own point of origin. An example is

```
LINE (160,0)-(160,199)
```

This places a vertical line for SCREEN 1 at the midpoint of the screen while at the 1/4-3/4 division point for SCREEN 2.

A color graphic display using LINE -(x2,y2) is easily accomplished with a color monitor. Note that the beginning point x1,y1 is not required in all cases. Key in the following program for a bit of action.

```
5 Dick F. Wagner 2/93
10 KEY OFF
20 FOR N= 1 TO 300
30 IF N=300 THEN CLS: GO TO 20
35 REM do not make a separate line with GOTO 20, it won't work!
40 SCREEN 1
50 LINE -(RND*319,RND*199),RND*4
60 NEXT
```

Try changing line 40 to SCREEN 2, 8, or 9. In order to fill the screen change line 50 to properly match the screen. The first RND*319 will be changed to RND*638 and RND*199 changed to RND*340 as required. Note that the computer doesn't report a border overflow which is nice.

Line 50 is used in the folowing program for a display plus a bit of low level music, or sound. SCREEN 1 is used for this display.

```
10 SCREEN 1,0: KEY OFF
20 CLS: RANDOMIZE
30 CLS: Z=37 '37 is the lowest note available
40 WHILE Z: C=INT(RND*4)
50 FOR I=1 TO 6: SOUND 200+RND*1000,9
60 LINE -(RND*319,RND*199),C
70 SOUND Z,0: NEXT
80 Q=(Q+5+Z*RND)MOD Z: SOUND Z+Q,200
90 PAINT (RND*319,RND*199),INT(RND*4),C
100 SOUND Z,0: J=J+RND/Z
110 COLOR,J MOD2: WEND: END
```

This program is from an old SOLFTALK magazine and was originally entered in a contest as a one liner program!

ΦΦΦ